

E911 Phase II Carrier Implementation Report

Background/Contact Information

(1) Carrier Identifying Information

Summit Wireless, LLC

Operating Affiliates include Summit Wireless Billings, LLC, and Summit Wireless WOW, LLC
TRS Number has not yet been assigned by NECA.

(2) Contact Information

Rob Hughes

Network Manager

Summit Wireless, LLC

17800 Davenport Road

Dallas, TX 75252

Phone: 972-931-0011

Fax: 972-931-3304

FAX 601-362-4711

Email: robhughes@summitwireless.com

E911 Phase II Location Technology Information

(1) Type of Technology

Summit Wireless, LLC (“Summit”) believes that a network-based technology is the only option available as of the date of this filing. Most major handset manufacturers have notified the Commission that they will not produce location capable handsets in time to meet the Commission’s requirements. Nonetheless, should a suitable location capable handset become available, Summit will seriously consider utilized a handset-based technology. However, Summit is unaware of any technology which has been proven in independent, scientifically valid trials to meet the Commission’s requirements.

Summit will likely utilize a combination of TDOA (Time Difference of Arrival) and AOA (Angle of Arrival) technology position determining equipment.

TDOA uses multiple receivers, located at cell sites, with highly accurate timing sources. It requires a minimum of three receivers to locate a caller. The mobile units signal is received at the cell sites and time stamped. The difference in the time received is used to calculate intersecting hyperbolic lines. The intersection of these lines is an estimation of the callers location.

AOA utilizes an array of specialized antennas located at cell sites. The array determines the angle at which the mobile units signal arrives at each element of an array. The intersection of the angle at which the signal arrives at multiple cell sites is used to estimate the location of the caller.

Summit will likely use the same technology throughout its service territory. Presently, Summit is operational in five of its markets (Billings, MT, Kennewick-Pasco-Richland, WA, Coos Bay-North Bend, OR, Klamath Falls, OR, and Clarksburg-Elkins, WV).

In addition to Position Determining Equipment (PDE), all technologies require a location management system to interface between the PDE and the mobile switching center and the wireline network E911 system. It is possible that modifications to Summit's mobile switching centers and network may be required. It is also anticipated at modifications to the wireline E911 network will be required as well. Summit is unaware of the nature of any such required modifications. Summit is unaware as to the whether the wireline E911 network is capable of supporting Phase II E911 service in the areas in which it has been requested.

(2) Testing and Verification

Summit has not conducted any tests of Phase II technology. Summit will adopt testing and verification methods and procedures based on sound engineering and statistical practices. This testing and verification will likely be incorporated into routine testing of the wireless network by company technicians.

(3) Implementation Details and Schedule

Summit's strategy will be to purchase the required equipment (hardware and software) and services on the competitive market and deploy the same in accordance with the Commission's rules. Summit will notify the FCC of a specific schedule for implementation once a vendor has been chosen. Summit recognizes that the Commission's rules require the deployment of a Phase II system, even if none exists which fully meet the Commission's accuracy requirements.

(4) PSAP Interface

Summit will incorporate any required industry standards. It will transmit the data through the public switched telephone network to the PSAP following industry standards adopted by the service supplier providing E911 service to the PSAP.

(5) Existing Handsets

Summit will deploy a network based technology. This section is therefore not applicable.

(6) Location of Non-Compatible Handsets

Summit will deploy a network based technology. This section is therefore not applicable.

(7) Other Information

Summit has not received any valid requests for Phase II service.